

## Fish Passage & Diversion Screening Inventory Database Report Cover Sheet

The following report is extracted from the Washington Department of Fish and Wildlife's (WDFW) Fish Passage and Diversion Screening Inventory Database (FPDSI). WDFW makes every attempt to keep these reports in sync with FPDSI; however, the dynamic nature of the data and workflows associated with maintaining the database may result in short-term differences.

Users are encouraged to contact WDFW to discuss appropriate use of the data and how we can assist with fish passage barrier removal or inventory. Please visit the Fish Passage web site for contact information at: https://wdfw.wa.gov/species-habitats/habitat-recovery/fish-passage/about

#### **Disclaimers:**

- Data presented here represent a snapshot observation of conditions in a dynamic environment
  that is subject to change. Fish passage data are also collected from a variety of agencies and
  sources. Therefore, WDFW makes no guarantee concerning the data's content, accuracy,
  completeness, or the results obtained from use of the data. WDFW assumes no liability for the
  data represented here.
- These data are not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife.
- Note that some fish passage features, habitats or species may occur in areas not currently
  known to the WDFW Fish Passage division, and may not be reflected in this database. A lack of
  data does not necessarily indicate that a feature, habitat, or species are not present.
- Unauthorized attempts to alter or modify these data are strictly prohibited.
- Bankfull width measurements included in these reports should not be used for fish passage crossing design. They are solely for assessment purposes.
- The barrier status reported in this document is based on the swimming abilities of adult salmonids. Passabilities are a qualitative value, and should not be interpreted as a quantitative calculation. Please see page 1-4 of the Fish Passage Inventory, Assessment and Prioritization Manual for further clarification: https://wdfw.wa.gov/publications/02061
- EXIF data presented with Image Reports may be erroneous due to camera battery failures and resetting of camera clock functions.

#### Abbreviations:

Most abbreviations in this report are defined in the Quick Reference Tables of the Fish Passage Inventory, Assessment, and Prioritization Manual. Additional commonly used abbreviations are defined as follows:

**NFB** = no potential salmonid use, **BB** = both banks, **LB** = left bank looking downstream, **RB** = right bank looking downstream, **US** or **U/S** = upstream, **DS** or **D/S** = downstream, **WSDrop** = water surface drop, **BFW** = bankfull width, **OHW** = ordinary high water, **SLW** = scour line width, **CMP** = corrugated metal pipe, **Q**<sub>fp</sub> = fish passage flow, **V&D** = Velocity and Depth, **ROW** = Right of Way

The FPDSI database often uses default values such as '-99.99' or '-999' to represent null values.

## **WDFW Fish Passage and Diversion Screening Inventory Database**

## **Site Description Report**

| Site ID 990622                                     | Project                                      | FBRB                |           | ☐ Mitigated   |  |
|--|--|---------------------|-----------|---|--|
| Geographic Coordinat                               | es   | Waterboo            | dy        |   |  |
| Latitude (WGS 84):                                 | 48.226002                                    | Stream:             |           | Secret Cr   |  |
| Longitude (WGS 84):                                | -122.224349                                  | Tributar            | y To:     | Pilchuck Cr   |  |
| East (NAD 83 HARN):                                | 1,219,981.8                                  | WRIA:               |           | 05.0065   |  |
| North (NAD 83 HARN)                                | 1,059,634.6                                  | River M             | le:       | 0.67  |  |
|  |  | Fish Use            | e Potent  | ial: Yes  |  |
| General Location                                   |  | FUP Cri             | teria:    | Biological  |  |
| Road Name:   | I-5  | Owner               |           |   |  |
| Mile Post:   | 211.50                                       | Type:               | State     |   |  |
| County:  | Snohomish                                    | Name:               | Washin    | ngton State Department  |  |
| WDFW Region:                                       | 4  |                     | of Trans  | sportation  |  |
| PI Species   |  |                     |           |   |  |
| ☐ Sockeye  | ☐ Chinook                                    |                     | ✓ Sea     | a Run Cutthroat   |  |
| ☐ Pink   | ✓ Coho                                       |                     | ✓ Re      | sident Trout  |  |
| ✓ Chum   | ✓ Steelhead                                  | I                   | ☐ Bul     | II Trout  |  |
| Associated Features                                |  |                     |           |   |  |
| ✓ Culvert  | ☐ Dam  | ☐ Natural Ba        | arrier    | ☐ Diversion   |  |
| ☐ Non-Culvert Xing                                 | $\square$ Other                              | ✓ Fishway           |           |   |  |
| Location/Directions                                |  |                     |           |   |  |
|  | right and drive abou<br>guamish Tribal Nursu | ut 1 mile to the en | d of pav  | o Island exit. Turn right<br>rement, and continue into<br>g. Fishway is immed. US |  |
| Site Comments                                      |  |                     |           |   |  |
| NB Culvert. Locally kno-<br>culvert 05.0065 0.64 w |  | e WSDOT fishway     | / is immo | ediately US of private  |  |

#### 11/19/2021

These data represent a snapshot of the Washington Department of Fish and Wildlife's current records. Due to the ongoing nature of assessment and inventory of these features, these data may not accurately represent conditions on the ground, and are subject to change.

### WDFW Fish Passage and Diversion Screening Inventory Database

#### **Level A Culvert Assessment Report**

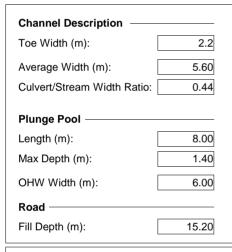
 Site ID:
 990622

 Latitude:
 48.226002
 Stream:
 Secret Cr
 WRIA:
 05.0065

 Longitude:
 -122.224349
 Tributary To:
 Pilchuck Cr
 Fish Use Potential:
 Yes

| Data Source: |             | Washington Department of Fish and Wildlife |                         |  |  |  |  |
|--------------|-------------|--|-------------------------|--|--|--|--|
|              | Field Crew: | Lautz;Roler                                | Review Date: 10/29/2019 |  |  |  |  |

| Culvert Details |              |                 |             |             | -             |             | Level A      | Parameters | -               |             |                  |           |          |
|-----------------|--------------|-----------------|-------------|-------------|---------------|-------------|--------------|------------|-----------------|-------------|------------------|-----------|----------|
| <u>ID</u>       | <u>Shape</u> | <u>Material</u> | <u>Span</u> | <u>Rise</u> | <u>Length</u> | <u>WDIC</u> | <u>Apron</u> | WSDrop     | <u>Location</u> | Countersunk | <u>Backwater</u> | Slope (%) | Sediment |
| 1.1             | RND          | SPS             | 2.45        | 2.45        | 94.40         | 0.77        | NO           | 0.00       |                 | No          | No               | 2.47      |          |
| All             | dimensio     | ns in mete      | ers         |             |               |             |              |            |                 |             |                  |           |          |





| Assessmer | nt Results | Tidal Influence: |     | Tidegate Pre | esent: | No      |
|-----------|------------|------------------|-----|--------------|--------|---------|
| Barrier:  | Yes        | Passability (%): | 67  | Method:      |        | Fishway |
| Reason:   | WS Drop    | Fishway Present: | Yes | Recheck:     |        |         |

#### Comments

Original inventory by Barkdull 1996, FW installed in 2000. Existing pipe is damaged with multiple large holes in the bottom that cause flow disconnection during lower flows also leading to a barrier condition.

### **Potential Habitat Gain**

| Potential Habitat ( | Jain |                  |        |             |       |
|---------------------|------|------------------|--------|-------------|-------|
| Survey Type:        | PS4  | Spawning (sq m): | 4,674  | Length (m): | 8,215 |
| Significant Reach:  | Yes  | Rearing (sq m):  | 17,264 | PI Total    |       |

## **WDFW Fish Passage and Diversion Screening Inventory Database**

## **Fishway Assessment Report**

| Site ID: 990622  |  |  |
|--|--|--|
| Latitude: 48.226002  | Stream: Secret Cr  | WRIA: <b>05.0065</b>                             |
| Longitude: -122.224349   | Trib To: Pilchuck Cr   | River Mile: 0.67                                 |
| General Description  |  |  |
| Fishway Type: BC, SBC  | Construction Year: 200   | OO Attached To: Culvert                          |
|  | ong SPS culvert is equipped with 15 expron. Five DS log controls step the streat was measured on a baffle. |  |
| Weir Pool, Pool Chute, Verti   | ical Slot, and Steep Pass Fishway Co   | mponents   |
| Number of Pools:   | Number of Weirs: 16  | Weir Type: Metal                                 |
| Entrance Pool Depth (m):   | 1 Maximum Water Surface Differe  | nce (m): 0.24                                    |
| Streambed Elevation Contro   | ols  |  |
| Control Location: DS   | Number of Controls: 5  | Control Type: LC                                 |
| Culvert ID Number  1.1  Assessement Criteria Inspection Frequency:  Maximum WS Drop (m):     | Type  Annual  0.24   |  |
| Status:  Barrier: Yes  Comments  Fishway is under NB I-5. The gradient, passable box culvert | Reason: WS Drop  stream is day lighted in the median and twith no baffles. The existing                    | Passability (%): 67  goes under SB I-5 in a low- |
| Potential Habitat Gain   |  |  |
| Survey Type: PS4 Significant Reach: Yes  | Spawning (sq m): 4,674  Rearing (sq m): 17,264   | Length (m): 8,215 PI Total                       |

## WDFW Fish Passage and Diversion Screening Inventory Database Habitat Survey Summary Report

| Site ID: 990622   |                              |                        |              |
|---|------------------------------|------------------------|--------------|
| Latitude: <b>48.226002</b> Lone   | gitude: -122.224             | <b>349</b> WRIA:       | 05.0065      |
| Stream: Secret Cr Trib  | utary To: Pilchuck Cr        | PI Total:              |              |
| Survey Type PS4   |                              |                        |              |
| Spreadsheet File(s):  |                              |                        |              |
| 05.0065   | _2.xlsx, 05.0065             | lsx, 05.0065 0.64b.xls | x, 05.0065   |
| Downstream Survey   |                              |                        |              |
| Date: Crew:   | Lei                          | ngth (m): 1,031        |              |
| Downstream Comments:  |                              |                        |              |
| Brett Barkdull verified that CH, CO, adult CO & SH just below I-5 culver 991975; they will be fixed by Detrick        | t (Dec 1999) DS barriers     |                        |              |
| Upstream Survey Date: 4/30/1997 Crew: C Upstream Comments: Habitat areas include tributaries. La (Barber Sept, 1997). | ,                            | ngth (m): 8,215        | up in August |
|   |                              |                        |              |
| Potential Habitat Gain  Lineal (m): 8,215  Spawning Area (sq m): 4,674  Rearing Area (sq m): 17,264                   | Anadromous     Resident Only | Gain Direction (Resi   | ident Only): |
| Potential Species Benefit   |                              |                        |              |
| $\square$ Sockeye / Kokanee   | ☐ Chinook                    | Searun Cutthro         | oat          |
| ☐ Pink  | ✓ Coho                       | Resident Trout         |              |
| ✓ Chum  | Steelhead                    | ☐ Bull Trout           |              |

# WDFW Fish Passage and Diversion Screening Inventory Database Barrier Repair Report

| Site ID:    | 990622                                      |                       |
|-------------|---|-----------------------|
| Repair Type | culvert retrofitted with fishway            | Repair Year: 2000     |
| Compliance  | ee Check: Date: 4/28/2005 By: Whitne        | ey Barrier Fixed: Yes |
| Comments:   | Dedicated funding; project completed by WDF | W, Jenks.             |
|             |   |                       |
|             |   |                       |

Before After



## WDFW Fish Passage and Diversion Screening Inventory Database Image Report - Active

| Site ID:   | 990622                |               |   |                     |         |
|------------|-----------------------|---------------|---|---------------------|---------|
| Latitude:  | 48.226002             | Stream:       | Secret Cr   | WRIA:               | 05.0065 |
| Longitude: | -122.224349           | Tributary To: | Pilchuck Cr   | Fish Use Potential: | Yes     |
| Associate  | ed Features           |               |   |                     |         |
| ✓ Culv     | vert<br>-Culvert Xing | ☐ Dam         | <ul><li>Natural Barrier</li><li>✓ Fishway</li></ul> | Diversion           |         |







